

# FIRE APPARATUS MOBILE WATER SUPPLY OPERATOR

## PRACTICAL SKILLS CERTIFICATION EVALUATION PACKET

(NFPA Standard 1002, 2009 Edition)

Department of Public Safety Alaska Fire Standards Council 5700 E. Tudor Road Anchorage, Alaska 99507 (907)269-5052

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#### **Skill Sheet Packet Instruction**

#### **Purpose of the Skill Sheets**

All skills listed in this packet are consistent with the 2009 edition of the NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. The Alaska Fire Standards Council (AFSC) provides these skill sheets as the basis for Mobile Water Supply Operator testing and certification.

For certification purposes, the final skill examination will consist of a series of mandatory skill stations listed on the last page of this packet.

#### **Description & Use**

- 1. These skills sheets are designed for use by the Training Officer and Mobile Water Supply Operator candidate. Use of this packet throughout a training program will assist in verifying candidate competency and completion of the Mobile Water Supply operator Training Record.
- 2. For eligibility to complete the final certification examination, a candidate must demonstrate competency in all skills during training and satisfactorily compete all items on the Mobile Water Supply Operator training record document.
- 3. This packet is designed to encompass the requisite skills for Mobile Water Supply Operator these skill sheets are used for final testing and certification. Accreditation Managers/Training Officers and Mobile Water Supply Operator course instructors should utilize this evaluation packet during a course to prepare candidates for the certification exam. For a candidate's final skills evaluation, she or he must successfully perform each skill while being evaluated on performance competency by an AFSC examination representative.
- 4. The final skills examination will consist of skills selected from this packet. Skills are selected from the mandatory skills categories. This packet contains a list of all mandatory skills that are used for the final examination.
- 5. The Certifying Officer will notify candidates which skills they will be required to complete at the start of the practical skills portion on the date of the examination.
- 6. The completion of the Mobile Water Supply Operator Training Record establishes a candidate's eligibility to test. The Training Record document must be fully completed and signed by the Accreditation Manager/Training Officer or designee for each candidate before a candidate can begin the final skills examination. The Mobile Water Supply Operator Training Record and the practical skills evaluation sheets shall become a permanent part of the candidate's local training record, and this information shall be kept on file in accordance with local fire department procedures.

#### **Grading Criteria**

- 1. It is expected that all of the listed skill sheet elements will be taught and evaluated by the Mobile Water Supply Operator instructor throughout a course. During the final skills exam the candidate must be prepared to perform all the skills listed in this packet. There are no specific critical points designated within the practical skill sheets, and the Certifying Officer (CO) will require the candidate to repeat an individual practical skill station if *all* of the listed skill items on a selected sheet are not completed by the candidate.
- 2. This packet contains skill requirements that involve the demonstration of driver skills within simulated vehicle operation scenarios related to emergency response activities. When applicable, skill sheets specifically describe when simulated conditions are permitted for certification testing.
- 3. There are critical performance items that must be followed for satisfactory performance. Examples of unsatisfactory performance can include:
  - a. Exceeding limitations: time, safety, and equipment limitations
  - b. Inadequate/insufficient personal protective equipment (lack of seatbelt[s], etc)

- c. Lack of skill accuracy and task completion as defined on the skill evaluation sheet
- d. Poor judgment in skill performance (i.e.- improper vehicle operation or equipment/safety violation)
- e. Failure to appropriately apply basic driver knowledge (speeding or violation of traffic laws)
- f. Not competent in the specified task or skill steps
- g. Outcome of the specified task is in doubt (i.e.- incorrectly performed or did not accomplish skill evaluation criteria)
- h. Need for Evaluator intervention (i.e.- imminent health or safety risk to candidate or others)
- i. Failure to adhere to basic safety principles or guidelines

#### **Artificialities of Training and Testing**

Training and testing for at this level can only approximate the on-the-job activities of a Mobile Water Supply Operator. There are certain artificialities to training and testing that the candidate must be able to adapt to. Simulations during the final examination are often necessary to complete the required practical skill scenarios. For the best possible outcome during final skills examination the Mobile Water Supply Operator course instructor must prepare the candidates to competently perform these skills under a variety of conditions.

#### **Final Skills Evaluation**

The AFSC designated Certifying Officer (CO) shall conduct the final evaluation and will utilize the practical skills evaluation sheets during the examination process. The CO has the overall test site authority and is required to perform his or her duties as outlined in the <u>Certifying Officer Manual</u>.

For preparation of the final examination the designated CO must coordinate with the Accreditation Manager/Training Officer, or designee, to ensure an adequate test site location is available. The Accreditation Manager/Training Officer is responsible for preparation of all test site equipment/materials and arranging designated evaluators for the date of the practical examination. The CO must verify that all required elements are adequate for testing and will approve all designated Evaluators. Designated Evaluators shall receive training appropriate for the test site and are required to complete an <a href="Evaluator Code of Ethics Compliance">Evaluator Code of Ethics Compliance</a> agreement before testing begins.

The CO shall verify completion of the final skills examination packet, and the packet will be attached to the Mobile Water Supply Operator Training Record as part of the candidate's permanent local training record.

#### **Prerequisite Certification Requirements**

For eligibility to certify at the Mobile Water Supply Operator level, candidates must:

- \*Meet all criteria for Driver Operator
- \*Provide evidence of completion of Driver Operator skills while operating a fire department Mobile Water Supply apparatus, as defined in section 4.2-4.7

\*Conduct Driver Operator skills while operating a Mobile Water Supply apparatus and attach completed Driver Operator Training Record

#### **Additional Notes:**

- 1. During the final practical examination it is expected that appropriate personal protective equipment (PPE) shall be worn for all skill stations, unless otherwise indicated within the skill evaluation sheet. When appropriate, candidates shall don *all* PPE appropriate for the scenario to maintain on-the-job conditions.
- 2. During some scenarios a candidate may be instructed to perform other Mobile Water Supply Operator tasks not directly related to the specific skill sheet evaluation being tested. It is expected that the candidate shall perform all related skills correctly.
- 3. Some skills may include a time limit. An Evaluator may use a digital or analog watch/stopwatch for final skills evaluation. Prior to the start of the practical examination, the CO must inspect and approve all timing devices used during final skills evaluations.
- 4. Some skills require that equipment be prepared or assembled within the final skills examination. Unless otherwise indicated, it is permissible for the candidate to prepare or assemble the required equipment or devices at any time, provided that this does not interfere with the core skill, task, or evolution.
- 5. Candidates must be prepared to complete skills under a variety of conditions. Training and skills practice is often done during optimum conditions, but candidates must be prepared to adapt to changing conditions that can occur in on-the-job situations.
- 6. Candidates must identify and respond quickly and appropriately to equipment malfunctions, improper application of tool usage, or other changes within a given scenario. The Evaluator ultimately determines if the candidate has met the criteria specified on the skill(s) being evaluated.
- 7. For final examination, the performance of a skill, task, or evolution is not required to be done in the exact order of the steps (as outlined on the skill sheet), unless it is critical to a particular task. For example, a person must secure a safety restraint device before driving an apparatus.
- 8. Some skills may require that a candidate verbalizes information about a particular task or procedure. In such cases, any question(s) from the Evaluator to the candidate must be limited to those that satisfy the criteria listed on the skill sheet, and a question cannot exceed the scope the Mobile Water Supply Operator requirements.

#### **Mobile Water Supply Operator Final Written and Practical Examinations**

Following is a brief outline of the reference materials and documents that are used for a Mobile Water Supply Operator final examination:

#### **Mobile Water Supply Operator Written Material References**

- a. NFPA 1002 Standard for Fire Officer Professional Qualifications, 2009 edition
- b. Text (any one of the following)
  - IFSTA, Pumping Apparatus Driver/Operator Handbook, 2<sup>nd</sup> Edition
  - Jones and Bartlett, Fire Service Pump Operator, Principles and Practice, 1st Edition
  - Delmar, *Introduction to Fire Pump operations*, 2<sup>nd</sup> Edition

#### **Mobile Water Supply Operator Practical Skills Evaluation References**

- a. NFPA 1002 Standard for Fire Officer Professional Qualifications, 2009 edition
- b. Mobile Water Supply Operator Practical Skills Evaluation Sheets (this packet)

#### **Final Examination Steps**

- a. \*Driver Operator Training Record review (this must be completed while operating a Mobile Water Supply Apparatus and signed off by the Accreditation Manager/Training Officer or designee prior to the date of the final examination and reviewed by the CO to ensure all elements are complete.
- b. \*Mobile Water Supply Operator Training Record review (this must be completed and signed off by the Accreditation Manager/Training Officer or designee prior to the date of the final examination and reviewed by the CO to ensure all elements are complete.
- c. Certifying Officer reviews and signs candidate Application for Certification
- d. Candidate completes the written examination administered by the CO
- e. Candidate completes the practical examination administered by the CO.
- f. Certifying Officer reviews completed Evaluator skill sheets and transfers information to the <u>Practical</u> Examination Reporting Form (PERF)
- g. Written exam, PERF, and signed application are forwarded to AFSC.
- h. AFSC Mobile Water Supply Operator certificate is issued upon successful completion of the written and practical exam (*within approximately 30 days of test date*)

\*Note: The candidate's completed Training Record and signed Final Examination skill sheets shall be placed in the candidate's local training file in accord

NFPA 1002- 2009 Ed.

#### PRACTICAL SKILL REQUIREMENTS

MWSO-1a

	Candidate:	Date:
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STANDARD: NFPA 1002: 10.1.1. SKILL AREA: Perform Routine Tests

**TASK 10.1.1:** Perform the routine tests, inspections, and servicing functions specified in the following list, so that the operational status of the mobile water supply apparatus is verified.

**PERFORMANCE OUTCOME:** The candidate shall demonstrate the ability to: use hand tools and equipment; recognize system problems; correct any deficiency noted in accordance with policies and procedures; deploy, energize, and monitor the system or equipment and to recognize and correct system problems; and complete all related departmental forms.

**EQUIPMENT:** Fire mobile water supply apparatus, radio unit, department policies and procedures (SOP/SOG), forms/reports, and notepad or computer.

**CONDITIONS:** Given a fire department mobile water supply apparatus and its manufacturer's specifications and maintenance inspection forms, the candidate shall demonstrate the ability to:

No.	Task Steps	TE	ST	RETE	EST 1	RETEST 2	
		Р	F	Р	F	Р	F
	Perform routine tests, inspections and/or service functions on	the fol	lowing	j:			
1.	Battery(ies)						
2.	Braking system						
3.	Coolant system						
4.	Electrical system						
5.	• Fuel						
6.	Hydraulic fluids						
7.	• Oil						
8.	• Tires						
9.	Steering system						
10.	Belts						
11.	Tools, appliances, and equipment						
12.	Verify operational level of water tank and other extinguishing agent levels (if applicable)						
13.	Verify operation of pumping systems						
14.	Verify operation of rapid dump systems						
15.	Verify operation of foam systems						
16.	Deploy, energize and monitor fixed equipment not otherwise specified (i.e. generators, floodlights, air compressors, etc)						
17.	Appropriately recognize equipment/system problems or deficiencies						
18.	Correct any found deficiencies, or document /report them in accordance with departmental procedures						
19.	Complete inspection reports and all related vehicle maintenance forms in accordance with departmental procedures						

NFPA 1002- 2	2009 Ed.	PRACTICAL S	KILL REQUIRE	MENTS	MWSO-1b
Cycluster			Retest Evaluato	r 1:	
Evaluator:			Retest Evaluato	r 2:	
Comments:	1				
				0	L ( D )(
	Certifying Officer Name		 Date	Overall Skill S	neet Result:
C	Sertifying Officer Signature	9		Pass (P):	Fail (F): ☐

NFPA 1002- 2009 Ed. PRACTICAL SKILL REQUIREMENTS MWSO- 2											
Candidate: Date:											
STANDARD: NFPA 1002: 10.2.1(B)  SKILL AREA: Maneuver and Position Apparatus- Fill Site											
TASK 10.2.1: Maneuver and position a mobile water supply apparatus at an established water shuttle fill site, so that the apparatus is correctly positioned, supply hose are attached to the intake connections without having to stretch additional hose, and no objects are struck at the fill site.											
<b>PERFORMANCE OUTCOME:</b> The candidate shall demonstrate the ability to determine a correct position for the apparatus, maneuver apparatus into that position, and avoid obstacles to operations. The intent of this requirement is for the driver/operator to be able to quickly and efficiently position the vehicle at a water shuttle fill site that has been established prior to the vehicle's arrival.											
		Fire mobile water supply apparatus ipply hose, and appliances.	s, rad	lio unit, depar	tment p	oolicies	and p	rocedu	ıres		
<b>CONDITIONS:</b> Given a fire department mobile water supply apparatus, a fill site location and one or more supply hose,, the candidate shall demonstrate the ability to:											
No.		TASK STEPS				TE	ST	RETE	EST 1	ST 1 RETES	
							F	Р	F	P	F
1.	Appropr	iately position the mobile water app	oaratı	us at the fill si	te						
2.		y deploy and assemble hose lines a lete task	and a	appliances ne	eded						
3.	Identify (as appl	water tank intake and connects hos icable)	se/ap	pliances corre	ectly						
4.	Open th	e appropriate valve(s) for the intake	e con	nections							
5.	Fills wat	er tank of apparatus from the site									
6.		he appropriate valve(s) for the inta									
7.	the next	ects the intake supply lines and profill operation	perly	places them	for						
8.	Avoids	obstacles at site with apparatus									
9.	Perform	all operations in a safe manner									
Eval	Retest Evaluator 1:										
Evaluator:  Retest Evaluator 2:											
Comments:											
		Certifying Officer Name			Date	Ove	erall S	Skill S	Sheet	Res	<u>ult:</u>
	Certifying Officer Signature  Pass (P):   Fail (F):								): □		

NFPA 1002- 2009 Ed. PRACTICAL SKILL REQUIREMENTS MWSO- 3											
Candidate: Date:											
STANDARD: NFPA 1002: 10.2.2(B)  SKILL AREA: Maneuver and Position Apparatus- Dump Site											
TASK 10.2.2: Maneuver and position a mobile water supply apparatus at an established water shuttle dump site, so that all of the water being discharged from the apparatus enters the portable tank and no objects are struck at the dump site.											
PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to determine a correct position for the apparatus, maneuver apparatus into that position, avoid obstacles to operations, and operate the fire pump or rapid water dump system. The intent of this requirement is for the driver/operator to be able to quickly and efficiently position the vehicle at a water shuttle dump site that has been established prior to the vehicle's arrival.											
		Fire mobile water supply apparatus upply hose, and appliances.	ıs, radio	o unit, departn	nent p	olicies	and p	rocedu	ures		
		Given a fire department mobile was shall demonstrate the ability to:	ater su	ipply apparatu	s and	an es	tablish	ed dur	np site	locati	on,
No.		TASK STEPS				TE	ST	RETE	EST 1	RETE	EST 2
						Р	F	Р	F	Р	F
1.	Appropr	riately position the pumper at the du	ump si	te							
2.	Identify	water tank discharge and correctly	/ engaç	ge							
3.	Operate	e pump or rapid water dump system	n valve	correctly							
4.	Dischar	ge all available water in tank ( <i>or as</i>	s direct	ed for scenari	o)						
5.	Closes discharç	the appropriate valve(s) and/or shu ge	uts-dow	vn water dump	)						
6.		the apparatus to the road operation	on								
7.	Avoids	obstacles at site with apparatus									
8.	Perform	all operations in a safe manner									
Evaluator:						1:					
Retest Evaluator 2:											
Comments:											
		Certifying Officer Name		 Da	ite	Ove	erall S	Skill S	Shee	Res	ult:
	Certifying Officer Signature  Pass (P):   Fail (F):								i): 🗆		

Certifying Officer Signature

NFPA 1002- 2009 Ed. PRACTICAL SKILL REQUIREMENTS MWSO- 4												
Candidate: Date:												
STANDARD: NFPA 1002: 10.2.3(B) SKILL AREA: Establish Shuttle Dump Site												
TASK 10.2.3: Establish a water shuttle dump site, so that the tank being drafted from is kept full at all times, the tank being dumped into is emptied first, and the water is transferred efficiently from one tank to the next.												
PERFORMANCE OUTCOME: The candidate shall demonstrate the ability to deploy portable water tanks, connect and operate water transfer equipment, and connect a strainer and suction hose to the fire pump.												
<b>EQUIPMENT:</b> Fire department pumper, mobile water supply apparatus, radio unit, department policies and procedures (SOP/SOG), two or more portable water tanks, low-level strainers, water transfer equipment, fire hose, and appliances.												
CONDITIONS: Given a fire department pumper, mobile water supply apparatus, equipment, and personnel, the candidate shall demonstrate the ability to:												
No.	No. TASK STEPS TEST RETEST 1							RETEST 2				
							Р	F	Р	F	Р	F
1.	Identify	and appropria	ate location of wa	ater shutt	le dump site							
2.												
3.	3. Identify and direct set up of the hard tube and low level strainer											
4.		and direct set water tank tr	t up hose and ap ansfer	pliances	necessary for							
5.	Correctl transfer	• •	apparatus pump	o for draft	ting and water							
6.	Establis	hes rotation c	of apparatus									
7.		t water draftin tank level at a	ng operations wh all times	ile mainta	aining an adeqı	uate						
8.	Perform	all operations	s in a safe mann	ner								
Retest Evaluator 1:												
Evai	Retest Evaluator 2:											
Comments:												
Certifying Officer Name  Overall Skill Sheet Result:												
		Certifying Officer	r Name			Date	Ove	eraii S	SKIII (	<u>sneet</u>	Kes	<u>uit:</u>
Certifying Officer Signature  Pass (P):   Fail (F)						<b>):</b> 🗌						

### MOBILE WATER SUPPLY OPERATOR PRACTICAL SKILLS CORRELATION MAP

IVA/II									
CORE JOB PERFORMANCE REQUIREMENTS									
(NFPA 1002, 2009 Edition)									
Skill Sheet #	NFPA Section-	Tasks	Certification Examination Requirements: 1- Locally Verified 3- Mandatory						
Practical Skills	Practical Skills Completed at Department Level for Application Packet Review								
MWSO 1	10.1.1 (B)	Perform Routine Maintenance Document Routine Maintenance Operate All Fixed Systems	Dept. Verified						
MWSO 2	10.2.1 (B)	Maneuver and Position Apparatus- Fill Site	Mandatory						
MWSO 3	10.2.2 (B)	Maneuver and Position Apparatus- Dump Site	Mandatory						
MWSO 4	10.2.3 (B)	Establish Shuttle Dump Site	Mandatory						